

Appl. No. 10/710,690
Amdt. dated March 07, 2006
Reply to Office action of January 06, 2006

REMARKS/ARGUMENTS

1.Rejection of claims 1-23 under 35 U.S.C. 103(a) as being unpatentable over Lee (2002/0064037) in view of Vollkommer et al. (6,853,124) and further in view of Shibata et al. (5,648,858):

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Response:

Regarding claim 1:

Claim 1 of the present application is listed hereinafter for the Examiner's convenience.

10 「 Claim 1 A back light module for use in a dual-sided display having two parallel liquid crystal display (LCD) panels, the back light module comprising:
a plurality of external electrode fluorescent lamps (EEFLs) positioned between the two LCD display panels, each external
15 electrode fluorescent lamp comprising a first electrode and a second electrode, the first electrodes being electrically connected in parallel, and the second electrodes being electrically connected in parallel.」

20 The Examiner asserts that Lee, Vollkommer and Shibata have taught the back light module for use in a dual-sided display recited in claim 1, and rejects claim 1. However, the applicant disagrees and explains as follows.

25 Lee teaches a backlight unit 100 for a dual sided display having two parallel LCD panels 118 and 128 comprising a plurality of fluorescent lamps 102. However, Lee lacks teaching the fluorescent lamps 102 are EEFLs connected in parallel.

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Vollkommer teaches a flat fluorescent lamp using external electrodes.

Shibata, however, does not teach the electrodes of fluorescent lamps
5 connected in parallel as the Examiner asserts. The applicant hereinafter
quotes some related paragraphs (col.2 lines 24-49) from Shibata's
teachings and explains as follows:

“According to this technology, however, the brightness can be increased,
10 but there still remains a problem that interference fringes are formed on the
display frame to degrade the display quality by the interference between
the numerous stripe grooves formed and arrayed in parallel on the prism
plate and the numerous transparent electrode (e.g., pixel electrodes
electrically connected to gate lines and data lines, or segment electrodes or
15 common electrodes) formed and arrayed on the transparent substrate
surface of the liquid crystal display panel and in parallel with the
aforementioned stripe grooves.

An object of the present invention is to provide a liquid crystal display
20 device capable Of increasing the brightness of a back light and preventing
the interference fringes from being formed on the display frame.

In order to solve the above-specified problem, according to the present
invention, there is provided a liquid crystal display device in which a
25 back light is arranged below a liquid crystal display panel having a
plurality of transparent electrode wiring lines arrayed in parallel on at
least one transparent substrate surface and in which a prism plate having a
plurality of stripe grooves arrayed in parallel is arranged between said

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liquid crystal display panel and said back light, wherein the improvement resides in that the relation of $\lambda_{sub.1} \cdot \lambda_{sub.2} / (\lambda_{sub.2} + 0.075)$ is satisfied if said stripe grooves have a pitch $\lambda_{sub.1}$ (mm) and if the pixels in parallel with said stripe grooves have a pitch $\lambda_{sub.2}$ (mm)."

Obviously, what Shibata teaches is a plurality of transparent electrode wiring lines arrayed in parallel, not the electrodes of the fluorescent lamps. Therefore, Shibata fails to teach or suggest that the electrodes of the fluorescent lamps are connected in parallel.

According to MPEP 2143.03, to establish prima facie obviousness all limitations of the claims must be taught or suggested by the cited prior art.

The applicant argues that the combination of Lee, Vollkommer, and Shibata does not teach or suggest the limitations "the first electrodes being electrically connected in parallel, and the second electrodes being electrically connected in parallel" recited in claim 1, and therefore claim 1 should be allowed. Reconsideration of claim 1 is therefore requested.

Regarding claims 2-3 and 6-8:

Claims 2-3 and 6-8 are dependent on claim 1, and should be allowed if claim 1 is found allowable. Reconsideration of claims 2-3 and 6-8 is politely requested.

Regarding claims 4-5:

Claim 4 is dependent on claim 1, and claim 5 is dependent on claim 4. Claims 4 and 5 should be allowed if claim 1 is found allowable.

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Reconsideration of claims 4-5 is respectfully requested.

Regarding claims 9-23:

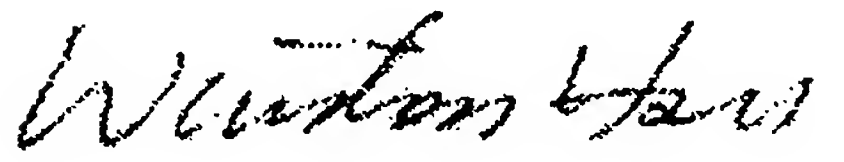
Claims 9-23 have been cancelled.

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Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,

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Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)

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